

Please amend the above-identified application in the following manner:

**IN THE CLAIMS:**

Cancel claims 1-5 and 7-13

Add the following new claims:

- Substantive*
25. A two-part tooth whitening system, comprising:  
a first part comprising metal ion chelator that is capable of activating tooth whitening when in contact with indigenous metal ions in the mouth, said first part also comprising a pH-adjusting agent; and,  
a second part comprising hydrogen peroxide.
- C*
26. A two-part tooth whitening system according to claim 25, wherein the metal ion chelator is selected from the group consisting of ethylenediamine tetraacetic acid (EDTA), diethylenetriamine pentaacetic acid (DETPA), nitrilotriacetic acid (NTA), 1-hydroxyethylidene-1,1-diphosphonic acid, ethylenediamine tetra(methylenephosphonic acid), and diethylenetriamine penta(methylenephosphonic acid).
27. A two-part tooth whitening system according to claim 25, wherein the metal ion chelator is a non-carboxylated polyhydroxy compound.
28. A two-part tooth whitening system according to claim 27, wherein the non-carboxylated polyhydroxy compound is selected from the group consisting of sorbitol, xylitol, mannitol, maltitol, and lactitol.
29. A two-part tooth whitening system according to claim 25 wherein the hydrogen peroxide is present at a concentration between about 3 percent by weight to about 15 percent by weight.

30. A two-part tooth whitening system according to claim 25, wherein the first part is aqueous and alkaline.

31. A two-part tooth whitening system according to claim 25, wherein the first part further comprises ions of one or more transition metals.

32. A two-part tooth whitening system, comprising:  
a first part comprising a metal ion chelator which, in the absence of transition metal ions, is transparent to light of wavelengths from about 350 nm to about 700 nm, but in the presence of a metal ion, becomes an activator capable of absorbing light of wavelengths from about 350 nm to about 700 nm, and wherein the first part also comprises a pH-adjusting agent; and,  
a second part comprising hydrogen peroxide.

33. A two-part tooth whitening system according to claim 32, wherein the metal ion chelator is selected from the group consisting of ethylenediamine tetraacetic acid (EDTA), diethylenetriamine pentaacetic acid (DETPA), nitrilotriacetic acid (NTA), 1-hydroxyethylidene-1,1-diphosphonic acid, ethylenediamine tetra(methylenephosphonic acid), and diethylenetriamine penta(methylenephosphonic acid).

34. A two-part tooth whitening system according to claim 32, wherein the metal ion chelator is a noncarboxylated polyhydroxy compound.

35. A two-part tooth whitening system according to claim 34, wherein the noncarboxylated polyhydroxy compound is selected from the group consisting of sorbitol, xylitol, mannitol, maltitol, and lactitol.

36. A two-part tooth whitening system according to claim 32, wherein the hydrogen peroxide is present at a concentration between about 3 percent by weight to about 15 percent by weight.

37. A two-part tooth whitening system according to claim 32, wherein the first part is aqueous and alkaline.

38. A two-part tooth whitening system according to claim 32, wherein the first part further comprises ions of one or more transition metals.

39. A two-part tooth whitening system, comprising:

an alkaline first part comprising a pH-adjusting agent and a metal ion chelator that, when bound to a metal ion and in contact with the surface of a tooth, becomes an activator capable of accelerating tooth whitening; and

a second part comprising hydrogen peroxide;

wherein when the first and second parts are applied to a tooth, the first and second parts are sufficiently transparent to light such that about 10 to about 200 milliWatt/cm<sup>2</sup> of light of wavelengths between about 350 nm and about 700 nm can be applied to a tooth surface bearing the first part and the second part.

40. A two-part tooth whitening system according to claim 39, wherein the metal ion chelator is selected from the group consisting of ethylenediamine tetraacetic acid (EDTA), diethylenetriamine pentaacetic acid (DETPA), nitrilotriacetic acid (NTA), 1-hydroxyethylidene-1,1-diphosphonic acid, ethylenediamine tetra(methylenephosphonic acid), and diethylenetriamine penta(methylenephosphonic acid).

41. A two-part tooth whitening system according to claim 39 wherein the metal ion chelator is a non-carboxylated polyhydroxy compound.

42. A two-part tooth whitening system according to claim 41, wherein the non-carboxylated polyhydroxy compound is selected from the group consisting of sorbitol, xylitol, mannitol, maltitol, and lactitol.